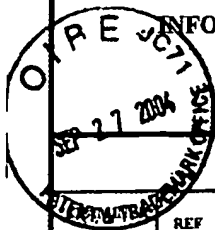


| <b>INFORMATION DISCLOSURE CITATION</b><br><i>(Use several sheets if necessary)</i>  |     |  |            | Docket Number (Optional)<br><b>132177-1</b> |                 | Application Number<br><b>10/678,459</b> |                            |  |  |
|---|-----|--|------------|---|-----------------|---|----------------------------|--|--|
|   |     |  |            | Applicant(s)<br><b>Guo et al.</b>           |                 |   |                            | <b>RECEIVED</b><br><b>CENTRAL FAX CENTER</b><br><b>FEB 16 2005</b> |  |
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| U.S. PATENT DOCUMENTS   |     |  |            |   |                 |   |                            |  |  |
| *EXAMINER INITIAL   | REF | DOCUMENT NUMBER  | DATE       | NAME  | CLASS           | SUBCLASS                                | FILING DATE IF APPROPRIATE |  |  |
| DS  |     | 4,290,938  | 9/22/1981  | Miyake et al.                               |                 |   |                            |  |  |
|   |     | US 2002/0161091 A1   | 10/31/2002 | Amou et al.                                 |                 |   |                            |  |  |
|   |     | 6,794,481  | 9/21/2004  | Amagai et al.                               |                 |   |                            |  |  |
|   |     |  |            |   |                 |   |                            |  |  |
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| U.S. PATENT APPLICATION PUBLICATIONS  |     |  |            |   |                 |   |                            |  |  |
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| FOREIGN PATENT DOCUMENTS  |     |  |            |   |                 |   |                            |  |  |
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| OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>   |     |  |            |   |                 |   |                            |  |  |
|   |     | International Search Report; International Application No. PCT/US2004/031685; International Filing Date 27/09/2004; Date of Mailing 22/12/2004 (6 pgs) |            |   |                 |   |                            |  |  |
|   |     |  |            |   |                 |   |                            |  |  |
| EXAMINER  |     | David Butten   |            |   | DATE CONSIDERED |   | 4/19/05                    |  |  |
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**INFORMATION DISCLOSURE CITATION***(Use several sheets if necessary)*

Docket Number (Optional)

132177-1

Application Number

10/678,459

Applicant(s)

Zarnoch et al.

Filing Date

10/03/2003

Group Art Unit

**U.S. PATENT DOCUMENTS**

| INITIAL | REF | DOCUMENT NUMBER    | DATE      | NAME         | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------|-----|--------------------|-----------|--------------|-------|----------|-------------------------------|
| DB      |     | US 2004/0146692 A1 | 7/29/2004 | Inoue et al. |       |          |                               |
|         |     |                    |           |              |       |          |                               |
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**U.S. PATENT APPLICATION PUBLICATIONS**

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**OTHER DOCUMENTS***(Including Author, Title, Date, Pertinent Pages, Etc.)*

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| ATTY DOCKET NO.<br>132177-1 |               | SERIAL NO.<br>10/678,459 |
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**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL | DOCUMENT NUMBER    | DATE       | NAME           | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------------------|--------------------|------------|----------------|-------|----------|-------------------------------|
| DB                  | US 3,306,875       | 2/28/1967  | Hay            |       |          |                               |
|                     | US 3,375,228       | 3/26/1968  | Holoch et al.  |       |          |                               |
|                     | US 4,148,843       | 4/10/1979  | Goossens       |       |          |                               |
|                     | US 6,251,308       | 6/26/2001  | Butler         |       |          |                               |
|                     | US 2002/0169256 A1 | 11/14/2002 | Merfeld et al. |       |          |                               |
|                     | US 2002/0173597 A1 | 11/21/2002 | Zarnoch et al. |       |          |                               |
|                     | US 2002/0177027 A1 | 11/28/2002 | Yeager et al.  |       |          |                               |
|                     | US 2003/0096123 A1 | 5/22/2003  | Yeager         |       |          |                               |
|                     | US 2003/0215588 A1 | 11/20/2003 | Yeager et al.  |       |          |                               |
|                     | US 4,562,243       | 12/31/1985 | Percec         |       |          |                               |
|                     | US 4,634,742       | 1/6/1987   | Percec         |       |          |                               |

**FOREIGN PATENT DOCUMENTS**

|    | DOCUMENT NUMBER | DATE     | COUNTRY  | CLASS | SUBCLASS | TRANSLATION |    |
|----|-----------------|----------|----------|-------|----------|-------------|----|
|    |                 |          |          |       |          | YES         | NO |
| DB | EP 0 261 574 B1 | 13.11.91 | European |       |          |             | ✓  |
| DB | DE 31 17 514 A1 | 2.5.81   | German   |       |          | ✓           |    |
| DB | DE 41 03 140 A1 | 2.2.91   | German   |       |          | ✓           |    |
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**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

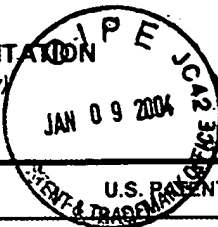
|    |  |   |
|----|--|---|
| DB |  | C. Pugh and V. Percec, Polym. Prepr. (Am. Chem. Soc., Div. Polym. Chem.) (1985), 26 (2), 303-5. |
|    |  |   |

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|---------------------------------|----------------------------|
| EXAMINER<br><i>David Butler</i> | DATE CONSIDERED<br>4/19/05 |
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10/678,459

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## U.S. PATENT DOCUMENTS

| EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE       | NAME            | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|---------------------|-----------------|------------|-----------------|-------|----------|-------------------------------|
| DB                  | US 4,663,402    | 5/5/1987   | Percec et al.   |       |          |                               |
| DB                  | US 4,665,137    | 5/12/1987  | Percec          |       |          |                               |
| DB                  | US 4,677,185    | 6/30/1987  | Heltz et al.    |       |          |                               |
| DB                  | US 4,701,514    | 10/20/1987 | Percec          |       |          |                               |
| DB                  | US 4,760,118    | 7/26/1988  | White et al.    |       |          |                               |
| DB                  | US 4,806,601    | 2/21/1989  | Percec          |       |          |                               |
| DB                  | US 4,923,932    | 5/8/1990   | Katayose et al. |       |          |                               |
| DB                  | US 5,071,922    | 12/10/1991 | Nelissen et al. |       |          |                               |
| DB                  | US 5,079,268    | 1/7/1992   | Nelissen et al. |       |          |                               |
| DB                  | US 5,091,480    | 2/25/1992  | Percec          |       |          |                               |
| DB                  | US 5,171,761    | 12/15/1992 | Penco et al.    |       |          |                               |

## FOREIGN PATENT DOCUMENTS

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## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

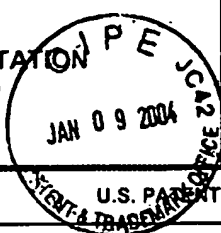
|    |  |
|----|--|
| DB | "Plastics Additives Handbook, 4th Edition" R. Gachter and H. Muller (eds.), P. P. Klemchuck (assoc. ed.) Hanser Publishers, New York 1993, pages 901-948.      |
| DB | S. J. Monte et al, Ann. Chem. Tech. Conf. SPI (1980), Ann. Tech. Conf. Reinforced Plastics and Composite Inst. SPI (1979), Section 16E, New Orleans, pp. 1-10. |

EXAMINER David Butcher

DATE CONSIDERED 4/19/05

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| <b>INFORMATION DISCLOSURE CITATION</b><br><i>(Use several sheets if necessary)</i> |  |  |  | ATTY DOCKET NO.<br>132177-1 |  | SERIAL NO.<br>10/678,459 |  |
|  |  |  |  | Zarnoch et al.              |  | FILING<br>10/03/2003     |  |



| U.S. PATENT DOCUMENTS |                 |            |                 |       |          |                               |  |
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| EXAMINER<br>INITIAL   | DOCUMENT NUMBER | DATE       | NAME            | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |  |
| DB                    | US 5,219,951    | 6/15/1993  | Nelissen et al. |       |          |                               |  |
|                       | US 5,304,600    | 4/19/1994  | Nelissen et al. |       |          |                               |  |
|                       | US 5,310,820    | 5/10/1994  | Nelissen et al. |       |          |                               |  |
|                       | US 5,218,030    | 6/8/1993   | Katayose et al. |       |          |                               |  |
|                       | US 5,338,796    | 8/16/1994  | Vianello        |       |          |                               |  |
|                       | US 5,407,972    | 4/18/1995  | Smith et al.    |       |          |                               |  |
|                       | US 5,352,745    | 10/4/1994  | Katayose et al. |       |          |                               |  |
|                       | US 5,834,565    | 11/10/1998 | Tracy et al.    |       |          |                               |  |
|                       | US 5,965,663    | 10/12/1999 | Hayase          |       |          |                               |  |
|                       | US 6,051,662    | 4/18/2000  | Tracy et al.    |       |          |                               |  |
|                       | US 6,352,782    | 3/5/2002   | Yeager et al.   |       |          |                               |  |

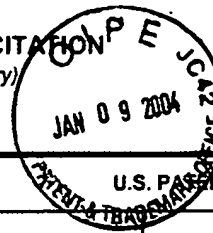
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| OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i> |  |  |
|---|--|--|
| DB  |  | L. B. Cohen, "Zirconaluminates Strengthen Premium Ranges of Chemical Coupling Agents", <i>Plastics Engineering</i> , Volume 39, Number 11, (1983) pp. 29-32. |
| DB  |  | S. J. Monte et al., "Coupling Composites With Titanate During Extrusion Process", <i>Modern Plastics</i> , May (1984), pages 74, 76, and 78.                 |

|                              |                                 |
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| EXAMINER: <i>Dawed Butte</i> | DATE CONSIDERED: <i>5/19/05</i> |
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| U.S. PATENT DOCUMENTS |                 |            |                  |       |          |                               |  |
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| EXAMINER<br>INITIAL   | DOCUMENT NUMBER | DATE       | NAME             | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |  |
| 03                    | US 6,384,176    | 5/7/2002   | Braat et al.     |       |          |                               |  |
|                       | US 6,469,124    | 10/22/2002 | Braat et al.     |       |          |                               |  |
|                       | US 6,521,703    | 2/18/2003  | Zarnoch et al.   |       |          |                               |  |
|                       | US 6,569,982    | 5/27/2003  | Hwang et al.     |       |          |                               |  |
|                       | US 6,617,398    | 9/9/2003   | Yeager et al.    |       |          |                               |  |
|                       | US 6,627,704    | 9/30/2003  | Yeager et al.    |       |          |                               |  |
|                       | US 6,627,708    | 9/30/2003  | Braat et al.     |       |          |                               |  |
|                       | US H521         | 9/6/1988   | Fan              |       |          |                               |  |
| V                     | US 6,355,832    | 3/12/2002  | Weferling et al. |       |          |                               |  |
|                       |                 |            |                  |       |          |                               |  |
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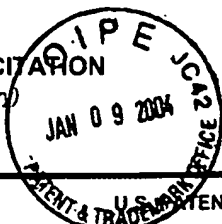
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## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE      | NAME             | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----------------|-----------|------------------|-------|----------|-------------------------------|
| DB                   | US 6,534,673    | 3/18/2003 | Weferling et al. |       | 1        |                               |
| DB                   | US 6,547,992    | 4/15/2003 | Schlosser et al. |       | 1        |                               |
| DB                   | US 6,388,046    | 5/14/2002 | Campbell et al.  |       | 1        |                               |
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